

#### ABSTRACT

The present invention restrains generation of an eddy current caused by leaked magnetic flux; and reduces iron loss due to the eddy current.

A tooth 61 is mounted to a stator yoke 60 in a state in which at least part of it (a portion 81 to be inserted into the yoke) is inserted into an insertion hole 75 formed through the magnet-opposed surface of the stator yoke 60, and the cross-sectional area  $S_1$  (See Fig. 6A) of the portion 81 of the tooth 61 to be inserted into the yoke, which is taken perpendicularly with respect to lines of magnetic force  $B_1$  generated at the tooth 61 when a coil 62 is energized, is larger than the cross-sectional area  $S_2$  (See Fig. 6B) of the portion 82 to be disposed within the coil of the tooth 61, which is taken perpendicularly with respect to the lines of the magnetic force  $B_1$ .